REMARKS

In the Office Action dated January 12, 2010, claim 22 was examined while claims 1-21 and 23-39 remain withdrawn from further consideration in view of Applicant's previous election in response to the Restriction Requirement of August 25, 2006. The Examiner rejected claim 22, and made the rejection final. In response, Applicant has filed a Request for Continued Examination (RCE) as well as the following comments, and in view thereof, respectfully requests reconsideration of pending claim 22.

In the Office Action, claim 22 was rejected under 35 U.S.C. §102(b) as being anticipated by DeLuca et al US 5,843,928. The Examiner indicates that the '928 reference claims a novel class of 2-alkylidene-19-nor-vitamin D compounds (see claim 1), and claim 8 sets forth a specific side chain which is identical to the side chain of the vitamin D compound of present claim 22. Further, the Examiner states that the presently claimed compound of claim 22 is exemplified in claim 8 of the '928 reference when Y_1, Y_2, R_6 and R_8 are all hydrogen. The Examiner alleges that the compound of instant claim 22 is anticipated by the '928 reference because one of ordinary skill in the art would be able to "at once envisage" the specific compound of instant claim 22 within the generic chemical formula since the subgenus is more limited than the broad generic formula of claim 1 with the result that "very few combinations can be obtained." Thus, because of the limited genus set forth in claim 8 of the '928 reference, the Examiner alleges that one of ordinary skill in the art would "at once envisage" Applicant's claimed compound of claim 22 by selecting hydrogen for the various substituents Y_1, Y_2, R_6 and R_8 from the list of alternatives given in claim 8 of the '928 reference. Specifically, the Examiner states in the Office Action of January 12, 2010 that:

> "It is clear from the disclosure of Deluca et al. that hydrogen is the preferred substituent of Y_1, Y_2, R_6 and R_8 since in both Schemes I and II in columns 21-26 of Deluca et al. the end products are exemplified with hydrogen being the substituent of Y_1, Y_2, R_6 and R_8."

Applicant, however, respectfully disagrees for the following reasons.

Applicant has previously argued that the compound of present claim 22 is not specifically disclosed in the '928 reference because it is neither named nor specifically illustrated via a chemical structure in the '928 reference. However, the Examiner now takes the position that,

because the Schemes found in the '928 patent illustrate end products having a hydrogen atom being the substituent for Y_1, Y_2, R_6 and R_8 illustrated in the generic formula in the '928 patent, this clearly indicates hydrogen is the preferred substituent for Y_1, Y_2, R_6 and R_8. However, the fact that the Scheme shows an end product with hydrogen for Y_1, Y_2, R_6 and R_8 does not mean that hydrogen is the "preferred substituent". What it does mean is that the inventors of the '928 patent synthesized the compounds disclosed therein and, obviously, in order to obtain the compounds claimed, had to insert a hydrogen atom for the substituents Y_1, Y_2, R_6 and R_8. Otherwise, the inventors of the '928 patent would have obtained different compounds, and would have claimed those different compounds instead of the compounds they did claim.

Further, it is important to note that although the present inventors stopped the synthesis to obtain and test the compound of claim 22, they also could have synthesized additional compounds utilizing the so-called "end product" of claim 22 to obtain additional vitamin D compounds that do not have a hydrogen substituent for R_6 and R_8. For example, Applicant encloses US Patent No. 6,127,559 wherein, instead of a methylene group attached at carbon 2 of the A-ring, there is a methyl group attached at carbon 2. Applicant refers the Examiner to Scheme I found at columns 27-30, and in particular, the final step in the synthesis wherein the Examiner will note that compound 11 is converted into compounds 12 and 13. The Examiner will note that compound 11 has a 2-methylene group whereas compounds 12 and 13 have a 2-methyl group. This is clearly an example where, although the substituents R_6 and R_8 are both hydrogen in compound 11 of the '559 reference, compound 11 is not the desired end product, but instead is converted to compounds 12 and 13. Thus, compound 11 in the '559 patent is merely an intermediate product, and is not the desired end product. It is merely one step in the synthesis disclosed.

The same can be said of Scheme II of the '559 reference. The Examiner will see that compound 17, wherein both R6 and R8 are hydrogen, is converted to compounds 18 and 19 wherein a methyl group is attached at carbon 2 rather than a methylene group.

Scheme III of the '599 reference shows yet another synthesis where compound 11 (having a methylene group attached at carbon 2) is converted to a hydroxy-methyl group attached at carbon 2 of the A-ring. Thus, once again, the fact that there were hydrogen atoms at R_6 and R_8 did not mean that the compound having R_6 and R_8 both hydrogen was the desired end product. It is merely one step in the synthesis.

As noted above, the Examiner is considering the substituents Y_1, Y_2, R_6 and R_8 being hydrogen as the preferred substituents because the end product is synthesized having those substituents. However, nowhere in the description of the '928 reference does it state that the preferred substituents for Y_1, Y_2, R_6 and R_8 are hydrogen.

In summary, the mere fact that a combination of the structures shown in claims 8 and 1 of the '928 reference teaches a smaller genus than that of claim 1 alone does not mean that the compound of present claim 22 is anticipated thereby. As described in the previous Amendment dated October 21, 2009, a combination of claims 1 and 8 of the '928 reference still describes a genus which encompasses a vast number of compounds. In addition, there is no teaching or suggestion in the '928 reference to one skilled in the art to select the claimed compound of instant claim 22, and the mere fact that an end product is made having hydrogen as the substituents for Y_1, Y_2, R_6 and R_8 does not mean hydrogen is the "preferred" substituent. Accordingly, Applicant requests the Examiner withdraw the rejection of claim 22 under 35 U.S.C. §102(b) based upon the '928 reference.

An effort has been made to place this application in condition for allowance and such action is earnestly requested.

Respectfully submitted,

ANDRUS, SCEALES, STARKE & SAWALL, LLP

By _____
Thomas M. Wozny
Reg. No. 28,922

Andrus, Sceales, Starke & Sawall, LLP
100 East Wisconsin Avenue, Suite 1100
Milwaukee, Wisconsin 53202
Telephone: (414) 271-7590
Facsimile: (414) 271-5770